ARCHITECT iPhenytoin

510(k) Summary (Summary of Safety and Effectiveness)

This summary of the 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The assigned 510(k) number is:	
Preparation Date:	
Applicant Name: Carol Jochum	
Senior Regulatory Affairs Specialist	
100 Abbott Park Rd Abbott Park, IL 60064	

Device Name:

Carol.Jochum@abbott.com

Reagents

Classification Name: Diphenylhydantoin test system Trade Name: ARCHITECT *i*Phenytoin Immunoassay

Common Name: Diphenylhydantoin test

Governing Regulation: 862.3350 Device Classification: Class II Classification Panel: Toxicology

Product Code: LGR

Calibrators:

Classification Name: Calibrator, drug specific

Trade Name: ARCHITECT iPhenytoin Calibrators (A-F)

Common Name: Calibrator Governing Regulation: 862.3200 Device Classification: Class II Classification Panel: Toxicology

Product Code: DLJ

Legally marketed device to which equivalency is claimed:

AxSYM Phenytoin (K935375)

Intended Use of Device:

The ARCHITECT *i*Phenytoin assay is an *in vitro* chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of phenytoin, an anticonvulsant drug, in human serum or plasma on the ARCHITECT *i* System with *STAT* protocol capability. The measurements obtained are used in monitoring levels of phenytoin to help ensure appropriate therapy.

Description of Device:

The ARCHITECT iPhenytoin assay is a one-step STAT immunoassay for the quantitative measurement of phenytoin in human serum or plasma using CMIA technology, with flexible assay protocols, referred to as Chemiflex.

Sample, anti-phenytoin coated paramagnetic microparticles, and phenytoin acridinium-labeled conjugate are combined to create a reaction mixture. The anti-phenytoin coated microparticles bind to phenytoin present in the sample and to the phenytoin acridinium-labeled conjugate. After washing, pre-trigger and trigger solutions are added to the reaction mixture. The resulting chemiluminescent reaction is measured as relative light units (RLUs). An indirect relationship exists between the amount of phenytoin in the sample and the RLUs detected by the ARCHITECT *i* System optics.

Comparison of Technological Characteristics:

The ARCHITECT *i*Phenytoin assay is a chemiluminescent microparticle immunoassay (CMIA) method for the quantitative measurement of phenytoin, an anticonvulsant drug, in human serum and plasma. The AxSYM Phenytoin assay utilizes fluorescence polarization immunoassay (FPIA) technology for the measurement of phenytoin, an anticonvulsant drug, in serum or plasma.

Summary of Non-Clinical Performance:

The ARCHITECT iPhenytoin assay is substantially equivalent to the AxSYM Phenytoin assay in terms of precision, linearity and interferences as demonstrated in non-clinical performance data in this 510(k) submission.

Summary of Clinical Performance:

The ARCHITECT iPhenytoin demonstrated substantially equivalent performance to the AxSYM Phenytoin with a correlation coefficient of 0.993.

DEPARTMENT OF HEALTH & HUMAN SERVICES





Food and Drug Administration 2098 Gaither Road Rockville MD 20850

Abbott Laboratories c/o Ms. Carol Jochum Senior Regulatory Affairs Specialist 100 Abbott Park Road AP6C-2; Dept. 049C Abbott Park, IL 60064

SEP 1 1 2008

Re: k080696

Trade/Device Name: Architect iPhenytoin Immunoassay

Regulation Number: 21 CFR 862.3350

Regulation Name: Diphenylhydantoin test system

Regulatory Class: Class II Product Code: DIP, LGR Dated: August 25, 2008 Received: August 26, 2008

Dear Ms. Jochum:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0490. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address at http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Jean M. Cooper, M.S., D.V.M.

Fean M. Cooper, M.S., D.V.M.

Director

Division of Chemistry and Toxicology Office of *In Vitro* Diagnostic Device

Evaluation and Safety

Center for Devices and

Radiological Health

Enclosure

Indication for Use

510(k) Number (if known): 6080696

Device Name: ARCHITECT iPhenytoin

Indication for Use:

Reagents

The ARCHITECT iPhenytoin assay is an in vitro chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of phenytoin, an anticonvulsant drug, in human serum or plasma on the ARCHITECT i System with STAT protocol capability. The measurements obtained are used in monitoring levels of phenytoin to help ensure appropriate therapy.

Calibrators

The ARCHITECT *i*Phenytoin Calibrators are for the calibration of the ARCHITECT *i* System with *STAT* protocol capability when used for the quantitative determination of phenytoin in human serum or plasma.

Prescription Use X
(Part 21 CFR 801 Subpart D)

And/Or

Over-The-Counter Use ____(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE; CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Device Evaluation and Safety (OIVD)

Division Sign-Off

Office/of In Vitro Diagnostic Device

Evaluation and Safety

510(k) KO80696